



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/578,582

08/10/2006

Pascale Brassier

3338.92WOUS

1693

24113 7590 03/10/2010
PATTERSON, THUENTE, SKAAR & CHRISTENSEN, P.A.
4800 IDS CENTER
80 SOUTH 8TH STREET
MINNEAPOLIS, MN 55402-2100

EXAMINER

KIRKLAND III, FREDDIE

ART UNIT

PAPER NUMBER

2855

MAIL DATE

DELIVERY MODE

03/10/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/578,582	Applicant(s) BRASSIER ET AL.	
	Examiner FREDDIE KIRKLAND III	Art Unit 2855	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 January 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 5-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 5-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

NON-FINAL REJECTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 5, 7, are rejected under 35 U.S.C. 102(e) as being anticipated by Cooney
US Patent 7,647,809.

With respect to claim 5, Cooney an evaluation method for monitoring consequences of an impact at low speed and force on a structural composite material part covered with a film that changes color when under pressure and whose color intensity is directly related to a received shock force (abstract), the method comprising: calibrating a film (indicator paint 36) by testing an impact on test parts (32) covered in the film that are identical to a structural composite material part or on test tubes covered in the film, the test tubes being representative of the structural composite material part, to establish a link between a received shock force and a change in color in the film (col. 3 lines 12-60); evaluating impacted areas of the test parts or test tubes using an appropriate qualification method selected from the group consisting of: x-ray (col. 3 lines 3-11) or ultrasound to correlate the change in color in the film and a nature and extent of any structural disturbance of subjacent layers of the impacted area; and establishing a

Art Unit: 2855

scale of correspondences enabling qualification against a limiting threshold for acceptance of the evaluated part (col. 3 lines 3-60).

With respect to claim 7, Cooney teaches wherein the film comprises a matrix with drowned microcapsules susceptible to breaking up under stress of a determined threshold of force (col. 3 lines 12-27).

With respect to claim 9, Cooney teaches w herein the film is selected from commercially available films available in various levels of pressure sensitivity and, wherein an appropriate level of pressure is chosen by a limited force of impact that is acceptable for the structural composite material part when placed under such pressure (col. 3 lines 3-60).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6, 8, and 10, are rejected under 35 U.S.C. 103(a) as being unpatentable over Cooney US Patent 7,647,809 in view of Patterson GB 2107213.

With respect to claims 6, 8, and 10, Cooney teaches the claimed invention except wherein the structural composite material part comprises a high-pressure gas or liquid tank usable for space launches, the structural composite material part comprising

Art Unit: 2855

an impermeable internal metal or plastic layer upon which pre-engaged resin fibers are wound.

Patterson teaches a coating which is applied to a fibre reinforced aerospace component to provide a visual indication the object has sustained an impact which might have caused damage (abstract, page 1 lines 30-52).

Accordingly, it would have been obvious to one of ordinary skill in the art of pressure measuring coatings at the time the invention was made to modify the method as taught by Cooney to measure the impact and damage on aerospace parts as taught by Patterson in order to provide an accurate and easily usable apparatus and method for determining structural damage to aerospace parts.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to FREDDIE KIRKLAND III whose telephone number is (571)272-2232. The examiner can normally be reached on Monday through Friday 8am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lisa Caputo can be reached on (571) 272-2388. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2855

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Freddie Kirkland III/
Examiner, Art Unit 2855
3/8/10